

RESIDENTIAL DESIGN GUIDELINES

Section 7.0

Draft
September 2011



DESIGN GUIDELINES INTRODUCTION

7.1

The Design Guidelines sections of the Area Plan are designed to guide development within Serrano Summit and will incorporate the principles of Smart Growth, Sustainability, and Green Design. The Residential Design Guidelines begin with Neighborhood Planning concepts, and are then organized into Architectural Guidelines by four (4) primary housing types - Single Family Detached (SFD), Single Family Detached Enclave (SFD-E), Single Family Attached (SFA), and Multi-Family Attached (MFA). Section 8 of the Area Plan includes design guidelines for the planned Civic Center.

The Serrano Summit Community Design Guidelines have been prepared to ensure that the vision elements of the plan are well articulated and implemented throughout the project site by providing planning, architectural, and landscape design criteria.

The Design Guidelines will ensure implementation of the Area Plan goals and objectives for development. Such goals include:

- Incorporate sustainable features into all aspects of the community.
- Create a strong community identity for Serrano Summit
- Plan for a circulation system serving motorists, bicyclists, and pedestrians
- Create livable residential neighborhoods.
- Provide for a range of housing types to meet the needs of a variety of economic segments.
- Develop a land use plan responding to the environmental conditions of the area.

Sketches and graphic representations contained herein are for CONCEPTUAL PURPOSES ONLY and are to be used as general visual aids in understanding the basic intent of the guidelines. They are not meant to depict any actual lot or building design. In an effort to encourage creativity and innovation, the guidelines express “intent” rather than “absolute.”



Residential Design Fundamentals

The community of Serrano Summit is designed to promote a healthy and socially connected lifestyle for its residents through the creation of tightly integrated neighborhoods which maximize distance views, provide connections to trails, parks, and the rich open space amenities of the Serrano Creek Corridor. Diversity and creativity in design are encouraged within an underlying harmony of compatible styles and appropriate details. Important elements of design within Serrano Summit include:

- Formal street pattern with alternative routes to each destination.
- Reinforcement of community identity through architectural design.
- Integration of a pedestrian-friendly circulation system.
- Residential neighborhoods designed at a “human scale” and oriented to pedestrian activity.
- A variety of housing opportunities addressing multiple lifestyles.
- Homes that incorporate energy saving materials and techniques, whenever feasible and cost effective.



COMMUNITY RECREATION & COMMON FACILITIES

7.2

Serrano Summit has been developed around the central idea of providing a variety of resident friendly elements that promote a healthy, vibrant community dynamic. These elements include common recreational facilities such as a pool, clubhouse, and other facilities as appropriate to the scale and activity of each community neighborhood. Common facilities act as a socializing and gathering place within the neighborhood.

The following elements should be considered when designing for such facilities:

1. The community recreational center building should serve as the focal point of the community and should exhibit a high level of quality design with attention to detail on all readily visible sides.
2. Community pedestrian connectors such as open space, paseos, and sidewalks should connect with the "Clubhouse/Recreation Center."
3. All architectural elements within the community center and common facility (community connectors), such as street furnishings, benches, lighting, and trash receptacles should be consistent with the selected overall themed character of the community.

The Common Facilities may include the following amenities:

- Jogging/walking paths/trails
- Natural open space
- Neighborhood parks
- Dog park
- Seating node
- BBQ node

The Clubhouse/Recreation Center in Planning Area 14 may include the following amenities:

- Clubhouse building
- Pool
- Spa
- Tot/kid pool or water play area
- Sun deck
- Shade oasis
- Tot lot
- Restrooms and showers



NEIGHBORHOOD PLANNING DESIGN GUIDELINES

7.3

Introduction

Site Planning Concept

The goal of the Serrano Summit Area Plan is to integrate a variety of housing types into one cohesive neighborhood fabric. The benefits are two-fold: such integration creates diversity and enables a broad spectrum of homes within the community.

Neighborhood residential components may include:

- Single family detached neighborhoods, from conventionally-loaded homes to court-loaded enclave homes. The ability to mix-and-match these home types throughout a neighborhood allows for small, diverse pockets of single family detached residential design.
- Single family attached neighborhoods which often resemble small villages, with the buildings generally oriented around public spaces such as open areas and recreational amenities. Buildings often form linear edges or green courts, creating opportunities for pedestrian connectivity.
- Multi-family attached neighborhoods are generally oriented around public spaces, such as open areas and recreational amenities, with opportunities for pedestrian connectivity.

How to Use the Guidelines

The following guidelines have been written to guide builders and architects in creating site plans and architecture that is consistent with the community framework and planning principles of Serrano Summit as explained in this Area Plan. Sketches and graphic representations shown herein are intended to assist in defining the design fundamentals, while allowing for and encouraging individual interpretation and creativity.

Site Plan Design

Preserving Views

Careful building placement and street orientation can help protect privacy, views, and the visual quality of the community. Where feasible, preservation of the privacy of surrounding residential homes, as well as capturing long-range vistas to the south, east, and west, is encouraged.

Smaller Parcels

One of the Serrano Summit project's goals is to create neighborhoods that promote walkability and pedestrian accessibility of neighborhoods. By creating smaller residential parcels, builders can create a less "mass produced" environment with a more intimate character.

Community Circulation

The overall circulation concept for Serrano Summit emphasizes both vehicular and pedestrian connectivity. The community "spine" road (referred to hereinafter as 'B' Street) provides vehicular access to most of the development parcels within the master plan and features two roundabouts at either end of the roadway. 'B' Street also features pleasant walkways set within shady landscape zones. Together, these design features provide for walking between neighborhoods, as well as to the community recreation area, civic center, on-site parks, and other open space amenities.

Gated Neighborhoods

Gated neighborhoods are permitted in all residential areas of Serrano Summit at the discretion of the project master developer, the builder of each tract and the City of Lake Forest. If provided, gated neighborhoods are not required to have a street connection to an adjoining parcel unless necessary for secondary access, drainage, utility connections, and/or emergency egress; however, gated neighborhood must at least provide a pedestrian connection to adjacent planning areas.

Parcel to Parcel Connections

Connectivity within Serrano Summit will enhance the community feel and encourage utilization of open space and community amenities. To heighten the connectivity of Serrano Summit, at least one street connection is required between adjacent non-gated parcels. Pedestrian sidewalks shall be incorporated into the street pattern connection. Builders must coordinate parcel to parcel connections with the Master Developer and one another. However, where the street pattern of one parcel is previously established, the following parcel shall build their street pattern off the existing connection.

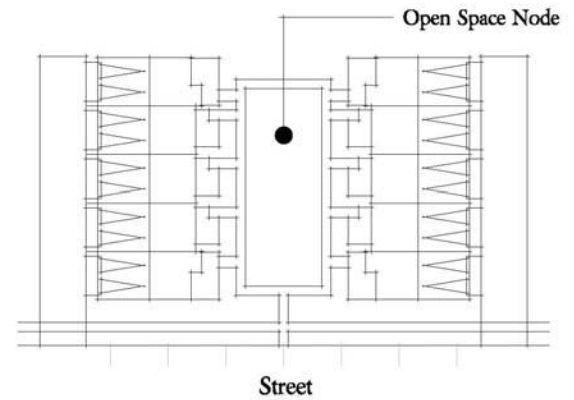
Parcel Connections to Streetscape, Paseos & Open Space

Within Serrano Summit, pedestrian connectivity from the residential neighborhoods to recreational amenities must be provided (See Exhibit 4-2, Master Plan of Parks, Trails & Open Space). These pedestrian linkages can be located in paseos (greenbelt areas that are separate from the vehicular circulation system). In addition, pedestrian linkages include sidewalks adjacent to public and private streets. There is also a multi-use trail connecting the Civic Center site to the open space. Together these linkages promote a strong pedestrian orientation to Serrano Summit, and provide the opportunity for alternative modes of travel.

Building Orientation for Single Family Attached and Multi-Family Dwellings

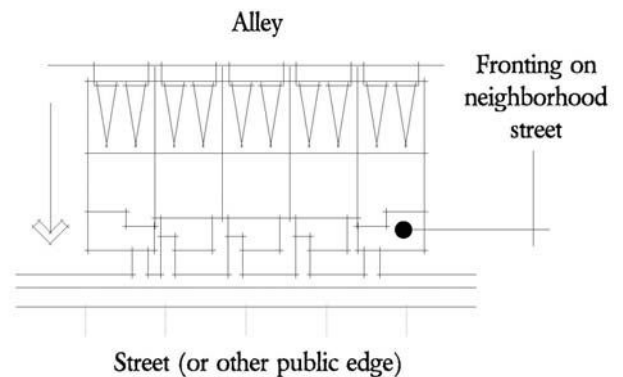
Building orientation for single family attached and multi-family dwellings is an important element in site design. Because of the nature of the housing type, most attached dwelling floor plans offer little private outdoor space. Therefore, the public areas become increasingly important as they provide the necessary outdoor space for recreation.

- Where feasible, buildings should be oriented in a manner which creates open space pockets and opportunities for recreational nodes.



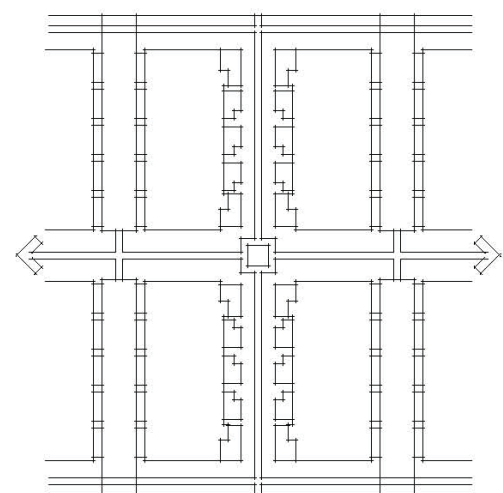
Open Space Pockets

- Front entries should face public edges, whether open space pockets, paseos, or streets.



Fronting on Public Edges

- Interconnecting walkways between buildings are encouraged.



Interconnecting Walkways

Plotting Standards

Floor Plan Variation

Single Family Detached and Enclave Dwellings

Single family dwellings should be plotted in a manner which provides variety in scale and architectural massing within a block. Variety not only provides visual interest to the neighborhood design, but it also provides each home with an identity. To achieve variety at Serrano Summit, several elements should be considered in the design of neighborhoods. Homes should offer a variety in floor plans, roof designs, materials, colors, garage orientations, outdoor living, and style-appropriate architectural detailing.

- Each neighborhood shall have a minimum of three floor plans for each single-family housing type (different plans are defined as those with significant variation in floor plan, garage access, and massing);
- Each of the floor plans must offer a minimum of three different architectural styles; and
- For single family detached homes, no more than two dwelling units with the same floor plan shall be plotted adjacent to one another. In addition, the floor plans shall be reversed and shall provide different elevations and color schemes to avoid a repetitious street scene.
- For enclave dwellings, no more than three dwelling units with the same floor plan shall be plotted adjacent to one another. For enclave homes, adjacent units shall be a different elevation and color scheme.

Single Family Attached and Multi-Family Dwellings

Attached and multi-family dwelling neighborhoods should offer a mix of floor plans and building types. Building type is defined as a composition of floor plans with a building massing that is distinguishable from other buildings within the neighborhood. This includes, but is not limited to, buildings with stacked flats, townhomes of varying sizes and orientations, and a mixture of these unit types.

- Attached and Multi-Family Communities
 - ~ *A minimum of two building types are required for each neighborhood, and*
 - ~ *A minimum of two floor plans is required for each building.*
 - ~ *Unit plans may be repeated within building types.*

- ~ *Provide at least one architectural style and two elevations or color schemes for that style per residential building type.*

Privacy

Privacy is an important consideration in residential site planning, especially when buildings are plotted with minimal side yards. Thoughtful site planning, landscaping, and other design techniques should be used to preserve privacy, where feasible.

Visible Edges

Neighborhood identity is closely tied to its interaction with community streets, open space networks and edge conditions. To maintain the visual quality of Serrano Summit, the thematic community streetscapes and open space edges along the perimeter of each development parcel have been addressed in this section.

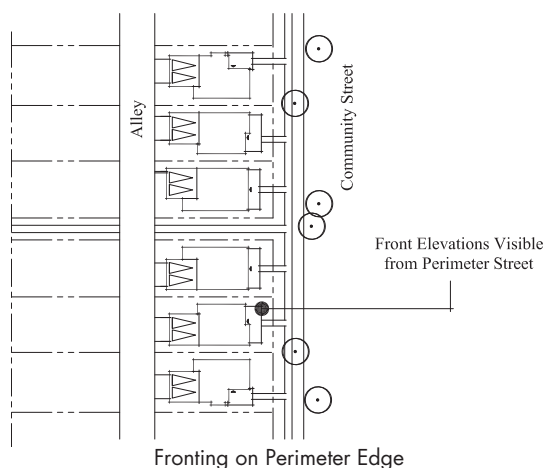
All homes and buildings located along prominent perimeter edges shall incorporate architectural enhancements to elevations exposed to the community streetscape or open space areas as detailed in this section.

Community "Spine" Road Edges

To the extent practical, parcel edges along 'B' Street shall have front or side elevations that are exposed to the perimeter master plan streetscape. This condition can be satisfied in one, or a combination of, the following ways:

"Front" Elevations

"Front" elevations include homes or plotting conditions where the front elevation (or front door) is exposed to the edge. This includes the front or corner side elevation of rear loaded and enclave homes. In this condition, walls or fences, if any, may be located between buildings only; provided, however, that front patio walls up to 42" in height are permitted.



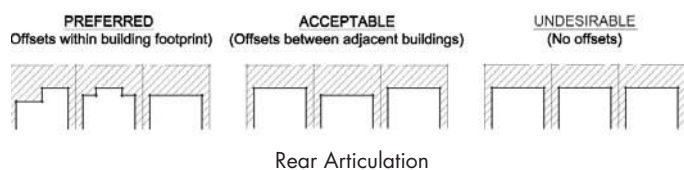
Other Visible Perimeter Edges

In other cases where a non-front elevation of a home or building faces a visible perimeter edge, the elevation shall be articulated in an appropriate manner. Such dwellings may incorporate the elements listed below.

Varying Rear Setbacks

Rear elevations adjacent to perimeter edges should provide some undulation in building placement and massing. This can be achieved through massing breaks or staggered setbacks between multiple homes:

- Staggered wall planes on an individual house with a minimum 2' offset, or
- Staggered rear setbacks on adjacent homes with a minimum 2' offset



Rear elevations may have no setback offsets if found to be appropriate with the overall theme of the neighborhood and when effectively complemented by sufficient landscaping.

Variation of Roof Planes

When appropriate to the architectural style of the home, a variety of roof forms is encouraged, including

gable, cross-gable, hip and clipped hip elements, or shed roofs.

Architectural Enhancements

Elevations of multi-family buildings visible from perimeter edge conditions should be designed similarly to the other elevations of the building.

Required Elements:

- Wrapping of materials from front elevation
- Trim on all other windows (as appropriate to style)
- Window grilles to match front elevation (if applicable)

In addition to the above, rear and side elevations that are visible from parks and streets shall also include architectural features from the list below.

Select at least two of the following:

- Offset wall planes (Minimum offset: 2')
- Articulation
- Roof plane breaks
- Color blocking
- Shutters on second-story windows
- Introduction of accent building materials and colors
- Introduction of accent elements such as outlookers, and decorative grille work, consistent with the front elevation
- Other similar features that provide articulation to the visible side or rear elevations.

Also, all rear and side elevations shall include the following architectural features:

- Trim on windows
- Accent colors
- Articulation (rear only)

Visible Corners

Corners are formed where two streets or paths intersect, thus making two sides of a corner dwelling visible—the front and the corner side. Where this occurs in single family detached neighborhoods, exposed corner side elevations should be designed to an appropriate level of detail as the front elevation to present similar quality elevations on both streets.

In addition, the following architectural enhancements should be incorporated into the design of homes plotted on visible corners:

- Open side yard landscape treatments;

- Building pop-outs and recesses;
- Roof plane breaks;
- Accent colors, materials and detailing; or
- Other similar features which enhance and provide articulation to the visible side elevation.

Garages, Driveways & Parking Areas

De-Emphasize Garages; Architecture-Forward Plans

When addressing the streetscene in single family detached communities, residential garages should be positioned to de-emphasize their visual impact. This will allow the active, visually interesting features of the house to dominate the streetscape. Where feasible to the home type, garages should be paired.

Garages may be sited in several ways:

- Recessed (shallow, medium, and deep)
- Corner lot with side-street entry garage
- Forward swing-in garage (53' or wider lots)
- Split garages
- Lane-loaded garage
- Detached garages
- Garage forward

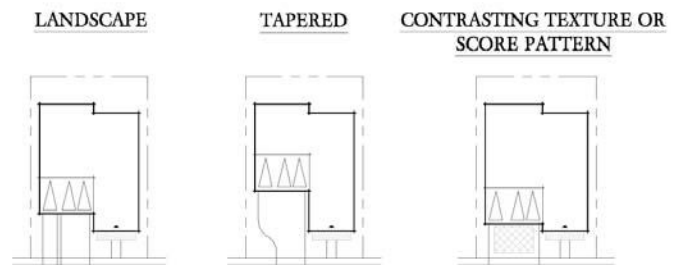
Garages for enclave homes should be located off of a court. Front homes within an enclave may have garages which take access directly from the street as well as the court.

Garages for single family attached and multi-family buildings may be rear- or front-loaded, and may exhibit a variety of siting conditions, dependent on the building type.

(See Section 7.4, Architectural Design Guidelines, for garage design criteria)

Driveway & Parking Criteria

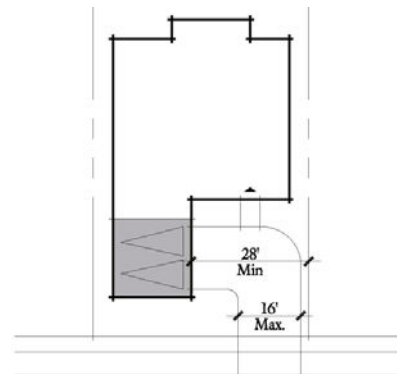
Minimum driveway lengths shall be either be five feet or less in length to discourage parking in the driveway or 18 feet or greater in length to accommodate parking in the driveway.



Driveway Variety

Note: Front entry driveways that are 16' in width or less do not require enhancement.

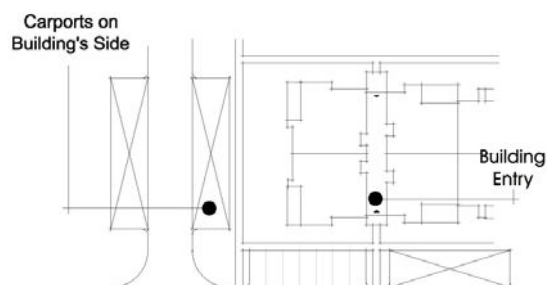
The maximum width of a driveway at the street for a turn-in garage shall not exceed 16'. The distance from the face of the garage door to the side yard lot line shall be a minimum of 28' (22' pavement and minimum 2' apron).



Turn-In Garage - Driveway Dimensions

Detached Garage Buildings & Carports

Special consideration should be made for the location of detached garage buildings and carports. In general, continuous carports at building entries should be discouraged.



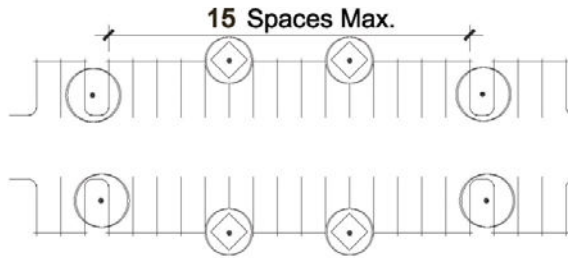
Unobstructed Front Entry

Where detached garages or carports are included, the style, color, and materials of these structures shall be compatible with that of the primary buildings.

Parking Areas

Parking areas should not be a dominant site feature. Where feasible, parking lots should be divided into a series of connected smaller lots. This can be accomplished by incorporating one of the following:

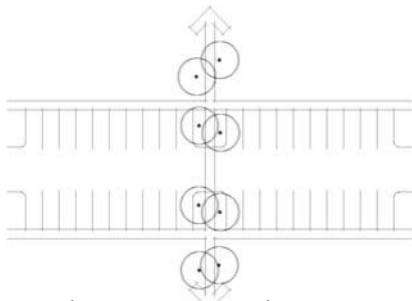
- A landscaped bulb should be used to break up parking lots, with a maximum of 15 contiguous spaces in a row and 10 spaces in a row on average.
- A landscape tree well shall be installed every 5 parking spaces between landscape bulbs.



Parking space separation

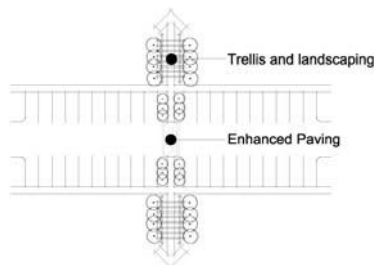
In addition, parking areas should be treated as “landscape plazas,” with attention to landscape surfaces, softened edges, shade, and pedestrian circulation. This can be accomplished by incorporating at least one of the following:

- Pedestrian walkways should connect public rights-of-way and residential land uses when appropriate.



Pedestrian Access in Parking Areas

- Enhanced paving materials, trellises, and landscaping should be used to accentuate the pedestrian circulation system.



Enhanced Pedestrian Circulation

Refuse & Recyclable Material Storage Areas

The following standards apply to all single family attached residential developments, apartments, parks, and the private recreation center within Serrano Summit:

- Refuse and recyclable materials storage areas shall be enclosed and screened in compliance with the City of Lake Forest Municipal Code.
- Storage areas should be screened from public view through the use of landscaping.
- Where appropriate to the building typology, refuse and recyclable material containers should be integrated into the overall building form to facilitate screening.
- Enclosures shall be finished using materials compatible with the surrounding architecture. Gates shall be solid metal painted to match adjacent buildings.
- The location of storage areas shall be conveniently accessible for trash removal by standard refuse disposal vehicles.
- Storage areas that can be overlooked from above should incorporate roof structures to screen the contents of the enclosure from view. Such roof structures should be designed to allow the doors of the refuse container to fully open.

Loading & Service Access

- Service, loading, storage, and maintenance areas shall be screened from public view where reasonably possible.
- No loading will be permitted from any public street adjacent to the site.
- Service areas must be located and designed so that service vehicles have clear and convenient access and do not prohibit adjacent vehicular or pedestrian circulation or vehicular parking.
- The final locations of loading/service areas will be approved by the City of Lake Forest.

ARCHITECTURAL DESIGN GUIDELINES

7.4

Introduction

Overall Goal

The intent of the following architectural design guidelines is to facilitate the creation of a high-quality, pedestrian-inviting community comprising multiple neighborhoods with a cohesive sense of place. The goal of the guidelines is to ensure a high level of quality in function and visual appearance, in addition to encouraging architectural variety and compatibility.

Simple Home Design

The following are goals for the community and will be enforced by the project master developer:

To meet the high demand for purchasing single family homes, affordability by design is an important consideration for home builders in Serrano Summit. Homes that feature simple structural forms such as building massing and roof forms will allow efficiencies in materials and construction that lower costs for the builder and buyer alike.

Smaller homes are especially likely to benefit from a simple, streamlined architectural design. The “simple house” approach, characterized by stacked massing, simple rooflines and a keen attention to detail, can maximize the buildable square footage of smaller lots. Certain architectural styles are particularly appropriate for the “simple house” approach because of their characteristically simple massing and distinctive details.

Single family detached enclave homes are well suited to simple home design. Architectural embellishments on the side of internal units are often not visible, and thus benefit from the cost savings of a more simplified massing.

The design of higher density single- and multi-family attached buildings must pay careful attention to conveying a sense of human scale. These buildings tend to have larger building masses, but must relate to the neighborhood in a manner that communicates the familiar language of domestic architecture.

All attached dwellings, regardless of architectural style or building typology, should exemplify quality design. Building elements such as form and massing, roof design, materials and color, garage design, detail elements, and functional elements should be consistent with the appropriate architectural styles and should complement those of surrounding buildings and land uses.

Simplified architectural massing also has positive impacts on the reduction of the carbon footprint of the building through more resource-efficient design.

How to Use the Guidelines

The following guidelines have been written to guide builders and architects in creating architecture which is consistent with the envisioned community. While many examples are provided, these are not mandated solutions. Instead, sketches and graphic representations are intended to serve as visual aids in understanding the specific concepts and ideas, while providing flexibility for individual interpretation and creativity.

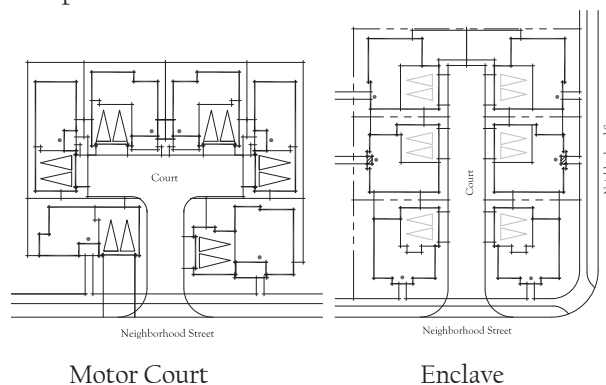
Included Housing Types

Single Family Detached

Housing types included in this category include front-loaded, and rear-loaded lots, as well as z-lots.

Single Family Enclave

Two examples of single family enclave homes are depicted below.



Single Family Attached

Housing types included in this category include rear- and front-loaded duplexes, attached enclave homes, townhomes, and stacked flats.

Multi-Family Attached

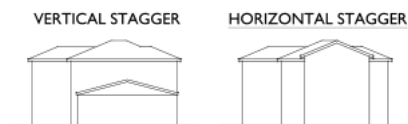
This category of housing types consists of rental apartments.

Building Form & Massing

To provide rhythm and balance to the architecture of a dwelling, simple bold elements should be integrated into the design of each building visible from a street or paseo. Several architectural elements should be used to meet this goal:

Vertical and/or Horizontal Stagger

Oftentimes a streetscene with numerous flat unarticulated walls creates an uninviting street presence. Floor plans should feature a mix of vertical and/or horizontal stagger to provide shadow and depth along highly visible edges such as streets and paseos. Within an enclave, homes should be plotted in such a manner as to provide similar relief along paseo edges.



Staggering wall planes limits the bulk of elevations

The form of attached residential buildings should be consistent with the appropriate architectural style and display architectural compatibility. Due to their nature as larger buildings, multi-family building design must be mindful of the relationship to, and impact on, adjacent neighbors. Each neighborhood should include a collection of varied but complementary forms that creates a streetscene that is clear to navigate physically and visually. Buildings should relate to each other both horizontally and vertically.

Maintaining human scale is an important element in attached residential building design. This can be achieved through breaking up one large building shape into multiple forms. The massing of each building should include a distinct base, middle, and top. These layers soften the visual impact of the building on the street, and create a friendly, domestic scale. The base, middle and top of a building can be differentiated using massing, color breaks, and changes in material.

- Visually prominent offsets, both horizontally and vertically, are encouraged in building design to minimize large expanses of uninterrupted wall planes.
- Combinations of two and three-story forms should be used to create variety in setback and overall building form.



Staggering wall planes limits the bulk of elevations

- Massing breaks, such as eroded corners and entry courts, promote visibility and allow block transparency.

One, Two, and Three-Story Forms

Some architectural styles lend themselves to tapered or stepped massing which reduces the bulk of a building. Where appropriate with the architectural style of the building, combinations of one, two and three-story forms to create variety in setback and building form is encouraged.

Building Height

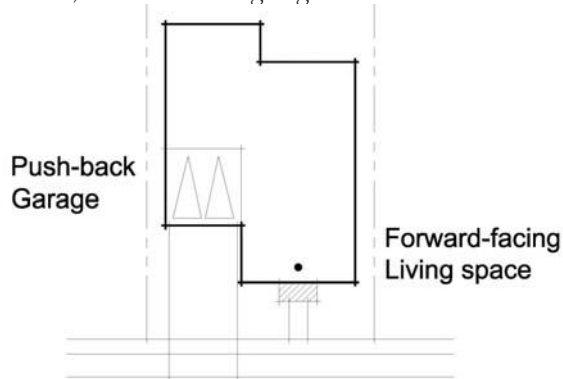
Buildings should incorporate elements that reduce visual height, such as:

- Balconies at building corners to provide negative space.
- Reduced massing along pedestrian-oriented edges is encouraged to create an inviting relationship between buildings and the pedestrian environment.

Forward-Facing Living Spaces

Forward-facing living spaces should be a key criterion for floor plan design and plotting of the dwelling. When compatible with the product type,

it is strongly encouraged that at least 50% of the street elevation should consist of living or entrance area, rather than the garage door face.

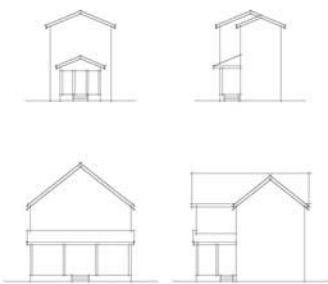


Garages should be positioned to de-emphasize their visual impact on the street

Building Symmetry

Streetscenes possessing visual interest and variety are primary components of Serrano Summit. Where appropriate to the architectural styles either symmetric or asymmetric plan forms are encouraged along street- or paseo-facing homes.

SYMMETRICAL ASYMMETRICAL



Where appropriate, either symmetric or asymmetric plan forms are encouraged.

Elevation Style

Architectural elements, such as building form, entry, roof, details, materials, and color should be consistent with each building's architectural style.

Architectural styles and elevations must be compatible and appropriate to the building typology (such as linear townhomes and stacked flats).

Single Story Elements

The introduction of single-story elements is encouraged to add variety to the street scene and

help establish pedestrian scale. Where appropriate to the architectural style, single-story elements should include:

- Porch
- Porte-cochere
- Single-story living space
- 4' second-story recess
- Pop-out gable element (enclosed or open)

Roof Design

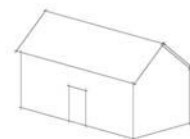
Homes within Serrano Summit adjacent to paseos and public streets should incorporate techniques that reduce visual height such as variety in roof forms, direction of slopes, and variety in ridgelines and height. These techniques provide diversity and interest to the building form and the neighborhood as a whole.

Roof Form

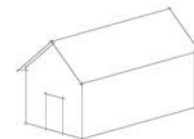
Variety in roof forms is encouraged throughout Serrano Summit. Appropriate roof forms include, but are not limited to:

- Gable (front and side)
- Cross gable
- Shed
- Hip

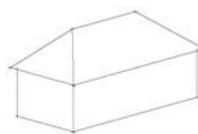
Where consistent with the architectural style of the building, the arrangement of different roof forms (including porch roofs, dormers, bays, cross gables, and hips) are encouraged.



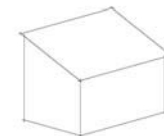
Side Gable



Cross Gable



Hip



Shed

Variety in roof form is encouraged.

Roof Pitch

Roof pitch should be consistent with the architectural style of the building, when properly designed in a manner that is architecturally consistent with the building. While 4:12 – 6:12 are generally typical roof slopes, other roof slopes are encouraged where consistent with the architectural style. Flat roofs are discouraged for single family detached homes, but may be permitted for attached and multi-family homes.

Elevation Style

While variety in roof design, materials, and overhangs is encouraged, roof treatments should be compatible with and appropriate to the architectural style of the building.

Fascias

Fascia design should be appropriate to the architectural style of the building. Generally, fascia boards should be made of wood, unless there is an exceptional reason.

Roof Vents

Roof vents should be painted to match the color of the roof material used.

Building Materials

Building color and materials are two of the most dominant visual elements in the architecture of a building. Quality, contrasting materials, including stone, brick, siding, and stucco, can enhance the value of a building.

The application of colors and materials should appropriately match the overall neighborhood design theme. The selection of material palettes should provide variety in color and texture while being harmonious. Also, the use of building materials should be integral to the design of dwelling and architectural style, and should not appear arbitrary, forced, or artificial.

Material Selection

Where appropriate to the architectural style of the building, a variety of materials should be used to

accentuate building form. Such building materials may include:

- Stucco with a finish of light or medium sand or light lace.
- Horizontal, vertical, board and batten, or shingle siding.
- Natural or simulated brick veneer.
- Stone or simulated stone, ledge stone, river rock, country rubble, or fieldstone.
- Contemporary materials, as appropriate to the architectural style of the building.

In prominent locations on buildings such as at main entries and corners of buildings, architectural treatments and materials may be enhanced.

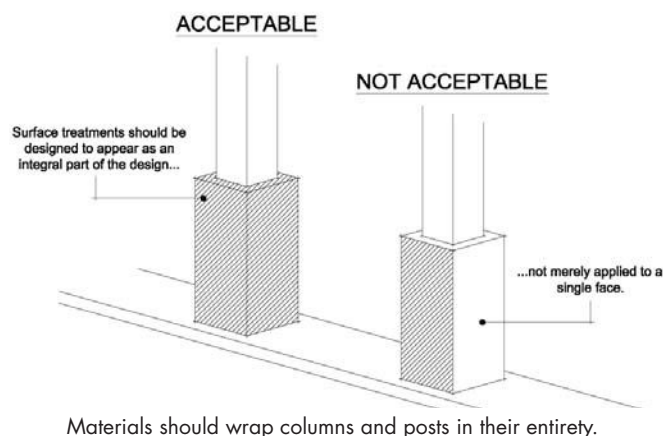
Finish materials should be appropriate in their use and application, durable and of high quality.

Refer to the architectural style sheets provided in the appendices for style-appropriate building materials.

Application of Building Materials

While a variety of building materials is encouraged, in no case shall building materials be chosen arbitrarily. All surface treatments and materials should be designed to appear as an integral part of the design, and not arbitrarily applied.

- Materials should wrap columns and posts in their entirety.
- Material changes should occur at significant architectural elements including roof breaks, half-columns, furred out edges, bay windows, or enhanced trim elements.



Roof Materials

To provide variety and interest to the neighborhoods in Serrano Summit, a variety of roof materials and colors are encouraged. All roof materials should be compatible with the architectural style of the building and should have a matte finish to minimize glare. Permitted roof materials include:

- S-Tiles, Flat Tiles, and Shakes: Clay or concrete may be used where appropriate to the architectural style of the dwelling.
- Slate or concrete slate: Slate may be used where appropriate to the architectural style of the dwelling.
- Architectural-grade composition
- Metal: Standing seam (as accent roof materials where appropriate to the architectural style)
- Built-up roof

Prohibited Materials

- Wood shingle or shake
- Rolled roofing material

Chimney flue spark arrestors should be disguised with a decorative metal shroud (painted to match the roof) when visible from the street.

Refer to the architectural style sheets provided in the appendices for style-appropriate roof materials.

Building Color

The selection and application of color is a key element to creating visually interesting neighborhoods. To achieve this, a distinct color palette should be developed for each neighborhood.

Color Palette

The color palette should be selected with the design objectives of avoiding monotony, providing a variety of colorful schemes, and promoting visual diversity. Selected colors should be consistent with the architectural style of the building.

Single-family neighborhoods should have a minimum of three color palettes per architectural style.

- Each color palette should contain a minimum of three different colors, not including the roof color.
- Masonry may be substituted for one of the required colors on appropriate styles.

- All primary field colors should be discernibly different from each other.
- Each scheme should have a different accent color.
- Fascia and trim colors may be the same within a scheme.
- Unless appropriate to the architectural theme of Serrano Summit, no two dwelling units with the same color palette should be plotted adjacent to one another.

Refer to the architectural style sheets provided in the appendices for style-appropriate color selection.

Application of Color

The selection of a style-appropriate color palette along with the thoughtful applications and composition of color is an important element in creating a visually attractive building as well as enhancing the value of a neighborhood and the character of the larger community. Requirements for color selection and application are as follows:

- The selection of a building's color palette should be appropriate to its architectural style.
- Color blocking, or the use of multiple colors, should be used only where appropriate to the buildings architectural style.
- Building and material colors should provide depth and interest and be non reflective.
- Selected finish materials should be appropriate in their use and application, durable and of high quality.
- Any field color on a wall plane used at the base of a building should continue down to the foundation.
- Color changes should generally occur at inside corners only.
- Accent colors should be used primarily on ornamental elements, railings, shutters, front doors, and similar architectural features.
- Masonry colors should be selected to compliment the architectural style and overall color palette of the building. Grout colors should harmonize and blend, rather than contrast with the colors of the particular masonry materials.
- Exposed woodwork, beams, posts, railings, etc. should be colored to match a buildings fascia
- Trim colors for window trim and recesses should be selected to be discernable for the building color.
- Exposed gutters and downspouts should be colored to match or compliment the surface to

which they are attached, or painted to match the buildings color palette.

- All bare metallic surfaces (vents, pipes, gutters – excluding copper gutters, etc.) must be painted or covered from view in a manner harmonious with the general exterior architecture treatment of the building. All flashing and sheet metal must be colored to match the material to which it is attached.
- Colors applied to fascia, garage door, window frame and mullions should be selected to complement the architectural style and color palette of the building.

Garage Design

The relationship between the residential building and the street is an important element of neighborhood character for Serrano Summit. On all streetscenes, the amount of building allocated to living space (living rooms, dining rooms, entries, and other non-garage spaces) shall be maximized. Primary forward-facing living spaces should be a key element of most floor plan designs along with plotting of the dwelling to help activate the street and promote walkable neighborhoods.

Garage Placement Options for Single Family Detached Homes

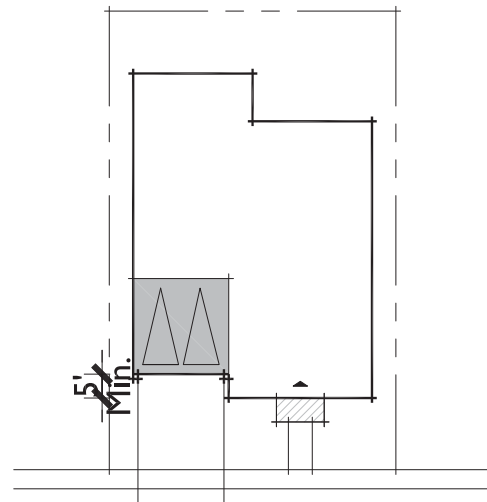
Garages for single family detached homes should be staggered with respect to orientation and location on the lot. Some garages may be pushed back from the house and others rotated to a turn-in fashion so the visually interesting features of the homes dominate the streetscene. Paired driveways and garages are permitted within all residential areas in Serrano Summit.

Excepting rear-loaded neighborhoods, each Single Family Detached neighborhood should feature a minimum of three of the following garage placement options. To maintain a diverse and non-garage dominated streetscene, no more than one floor plan per neighborhood may feature a flush/garage forward plan.

Recessed

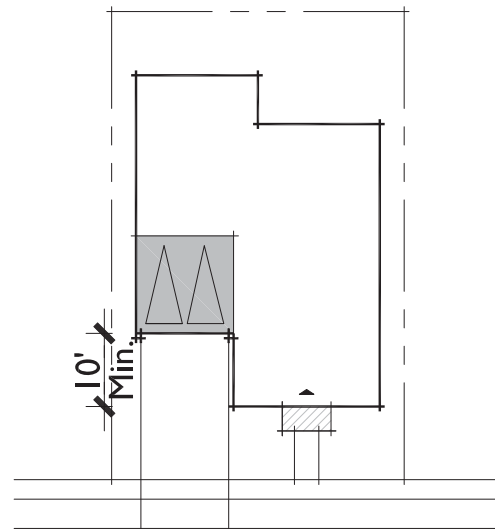
Recessed garages are located behind the front elevation/ living space.

- Shallow Recess: Garage is set back a minimum 5' from front elevation or living space



Shallow recess garage

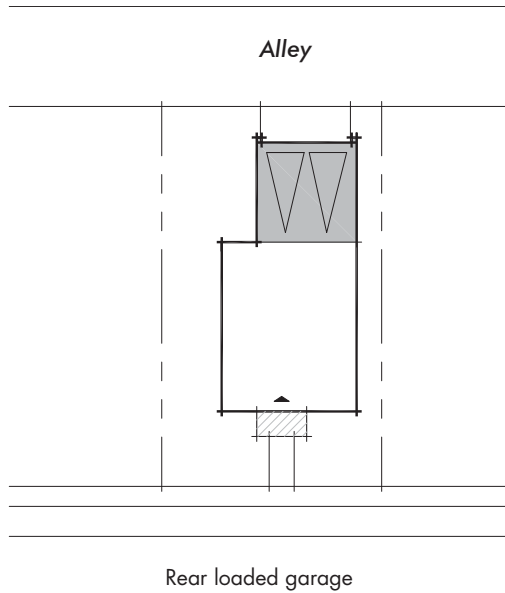
- Medium Recess: Garage is set back a minimum 10' from front elevation or living space



Medium recess garage

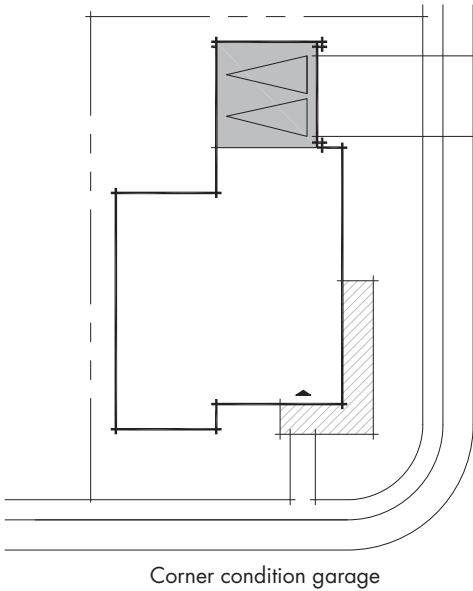
Rear Loaded

Rear loaded garages are accessed from a rear or side alley. The garage door face shall be recessed 6" or include fur-outs 6" forward of the garage plane (see image on following page).



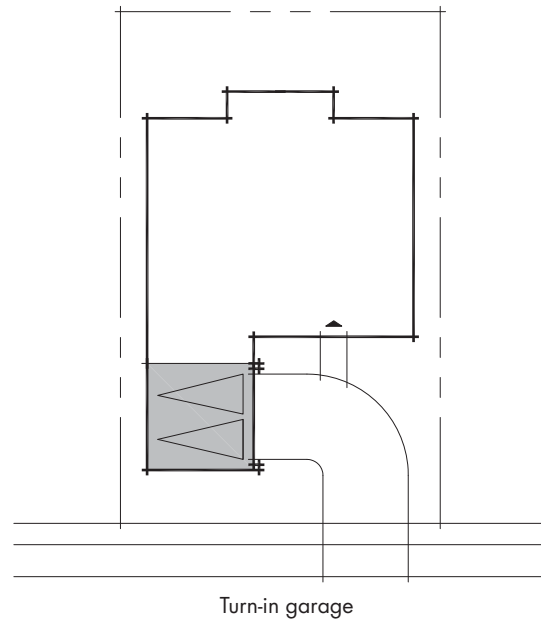
Corner Condition

This garage placement allows the option of entering from the side street, thereby eliminating the garage and driveway from the front face of the house. Side-street entry garages can be attached or detached.



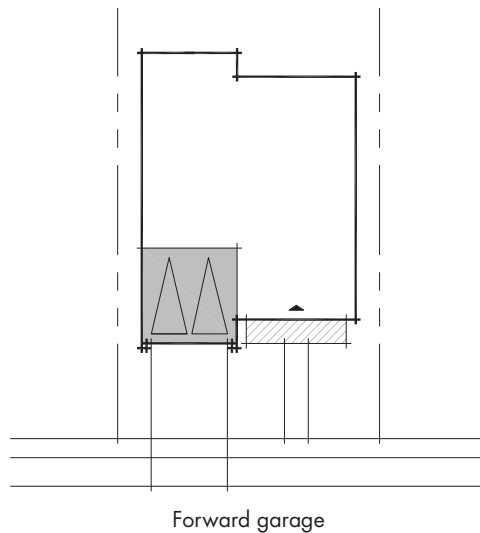
Turn-In

Turn-in garages greatly reduce the impact of garage door faces on the streetscape. These garage placements can be located at the front, side or rear of a plan. To provide adequate back-up space, side entry garages are limited to lots 53' or wider.



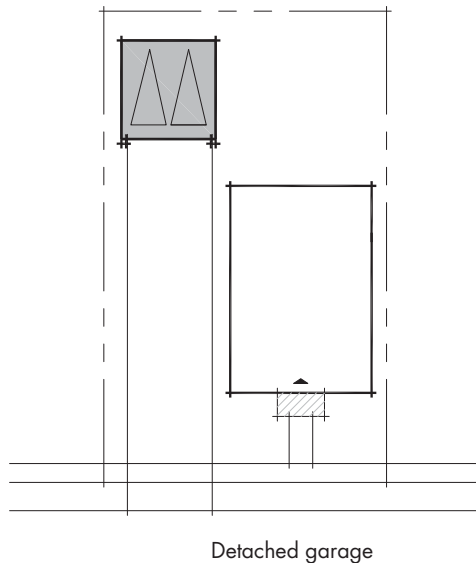
Flush / Forward Garage

This garage placement is located flush or forward of the home's front facade. Extra attention and treatments must be applied when using this garage location. For example, a decorative garden fence, low wall with gates, trellis, porte-cochere, or additional landscaping. Garage door faces should be recessed a minimum of 12 inches or have a fur-out of at least 12 inches projecting forward of the garage door.



Detached

Garages detached from the primary residence are generally located toward the rear of the lot. Similar architectural details as designed on the primary residence should be applied to the detached garage.



Tandem

Tandem garages are long, rectangular garages capable of accommodating two vehicles, end to end in the width of a standard one car garage. Tandem garages allow a narrower garage frontage and the ability to park automobiles in tandem. This orientation lessens the impact of the garage doors on the streetscene by creating the appearance of a single car garage. Tandem garages should be recessed a minimum of 12 inches or have a fur-out of at least 12 inches projecting forward of the garage door.

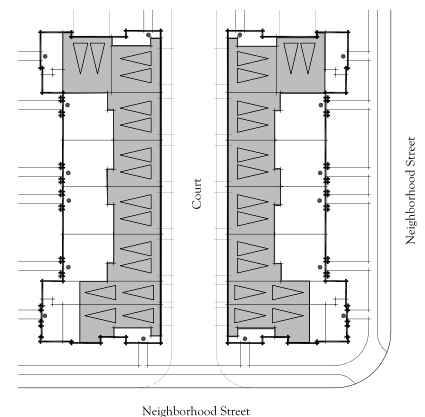
Current economic trends are favoring smaller dwelling unit sizes. Tandem parking allows for more flexibility and innovation in design and works well with higher density products. Higher density products are generally more affordable, which is what consumers are searching for in today's housing market.

The provision of a tandem garage, rather than the traditional two-door garage, provides an opportunity for housing complexes to fit more dwellings per acre without reducing parking requirements or sacrificing neighborhood character.

Tandem parking is a parking design tool, not a tool for reducing parking requirements. The most efficient operation of tandem parking is when both parking spaces are contained within an enclosed garage owned by a single owner.

In addition, tandem parking visually de-emphasizes the garage by making a two-car garage have the appearance of a one-car garage. This makes for a more appealing streetscene with fewer and smaller garage doors.

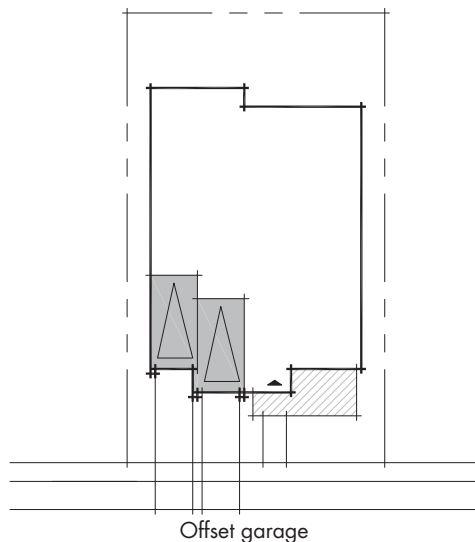
Use of tandem parking shall be evaluated on a case-by-case basis prior to the B Map process and future site development permit or use permit process. Requests for tandem parking must include justification that addresses how a tandem garage configuration will comply with parking in the same manner as a side-by-side garage.



Residential product with select tandem garages

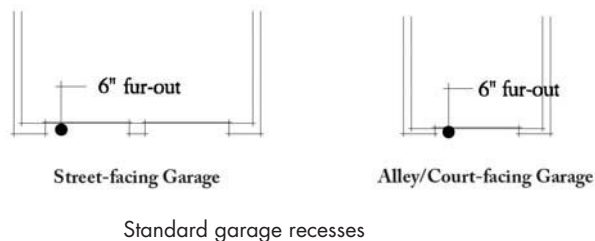
Offset Garages

Offset garages have garage doors which are offset from one another. The offset creates depth and shadow, articulation, and interest to the front façade of the dwelling. The garage door face of forward or flush garages should be recessed a minimum of 12 inches or have a fur-out of at least 12 inches projecting forward of the garage door.



Standard Garage Doors

Street-facing garage doors shall be recessed a minimum of 6 inches or be surrounded with 6-inch minimum fur-outs. Garages loaded off a lane or court street may have the garage door face offset a minimum of 6 inches or be surrounded with six-inch minimum fur-outs. No additional offset or fur-out is required on recessed or turn-in garages.



Garage doors shall be compatible with the architectural style of the residence. Decorative window lites, when used, should be appropriate to the architecture of the building.

Garages for Multi-Family Housing

- Provide one required covered parking space in garage or carport for each unit. See Section 10, Development Regulations, for parking requirements.
- Use of tandem parking shall be evaluated on a case-by-case basis during the B Map process.

Outdoor Living Space

The homes of Serrano Summit should create an inviting pedestrian environment. The incorporation of a usable outdoor living space into the design of each dwelling provides residents an opportunity to engage in the outdoor environment.

Covered Porches and Entries

Porches are outdoor covered spaces usually located at the front entry of the residence. They not only help to provide a pedestrian scale element to the building massing, but also allow an area for residents to enjoy the outdoor climate while conversing with neighbors.

- **Integral to the Design:** Where porches are provided, they should be designed as an integral element of the building with details, eaves, supports, and railings in keeping with the architectural style and other elements of the building's design.
- **Covered Elements:** Porches shall be fully covered in one of the following ways:
 - ~ *Roof element matching the residence*
 - ~ *Trellis structure*
 - ~ *Second-story balcony or overhang*
- **Columns:** Columns used in conjunction with porches should convey a sense of strength and support.
- **Minimum Size:** Covered porches shall be a minimum of 6' deep (posts or columns can be included in this minimum area).
- **Wrap Porches:** On corner lots or lots adjacent to open areas, porches that wrap the corner of the building are encouraged.
- **Covered entries,** if provided, shall have a depth of at least three feet (3') to provide shelter from the elements

Balconies

A balcony is a projecting platform on the exterior wall of a building that is usually enclosed by a railing or balustrade. Balconies provide visual relief to the building mass and add human scale. Balconies are either cantilevered outward from the exterior wall or supported from below by columns or brackets, depending on the architectural style of the building.

- **Integral to the Design:** Where balconies are provided, they should be designed as an integral element of the building with details, eaves,

supports, and railings in keeping with the architectural style.

- **Location:** Balconies may be covered or open (covered or trellised balconies are preferred for single-family attached and multi-family attached homes). They can be either recessed into the mass of the building or designed as a projecting element and can be located on any side of the dwelling.
- **Minimum Size:** In order to be functional, balconies should be a minimum of four feet (4') in depth.
- **Decorative Balconies:** The use of architectural enhancements such as decorative balconies is encouraged where appropriate to the architectural style of the building. No minimum depth is required for decorative balconies.
- **Columns:** Columns used in conjunction with balconies should convey a sense of strength and support.
- **Scuppers or internal drains** are required on all balconies for drainage.

Courtyards

A courtyard is a ground level outdoor space, partially or fully enclosed on all four sides by the building or courtyard walls. The design of a courtyard is integral to the floor plan as it provides a transition from the public street to the private entrance of the home.

- **Integral to the Design:** Where courtyards are provided, they should be designed as an integral element of the building; courtyard walls should be finished to match the building. Stone, ceramic tiles, steps, recesses, cut-outs, or wrought iron accents are encouraged.
- **Location:** Courtyards may be located on the front, side, or rear of the dwelling, or can be internal to the floor plan.

Architectural Detailing

In keeping with creating a quality development, architectural detailing is a key element to home design in Serrano Summit. The quality and appropriate use of detail elements is important and should be genuine to the architectural style of the building. Architectural detail elements may include:

- **Railing:** Wood or synthetic wood product, wrought iron, or tubular steel railing;
- **Brackets and Fascia:** Wood, synthetic wood product, or stucco outlookers, brackets, fascia, dentils, and corbels;

- **Trim, Headers, and Sills:** Wood, synthetic wood product, foam, or stucco trim surrounds, headers, and sills;
- **Decorative Ceramic or Clay:** Decorative ceramic or clay tiles and pipe vents;
- **Grille Work:** Decorative wrought iron grille work;
- **Gable-end Detailing:** Decorative wood, synthetic wood, or foam gable-end detailing;
- **Shutters:** Wood or manufactured shutters – Bermuda shutters, plank shutters, louvered shutters; and
- **Style Specific Elements:** Other architectural style specific details.

Buildings should activate the street, utilizing elements such as canopies and awnings, stoops, plazas, and enhanced entries with porches, trellises or courtyards, where appropriate to building typology and architectural style.

Entries

In order to create a pedestrian-friendly neighborhood, each home in Serrano Summit shall be designed with an enhanced front entry, where appropriate. The entry can be articulated in a variety of forms, but should remain consistent to the architectural style of the dwelling. Potential enhancements may include, but are not limited to:

- Porches;
- Covered entry;
- Courtyards;
- Projecting roof elements; and
- Porticos.

Windows

Generally, the location of windows is determined by the practical considerations of room layout, views, and privacy. Because windows play an important role in the exterior architectural character of the home, special emphasis should be given to the way windows are used for design effect.

- **Trim Surrounds:** All windows on the front, side, and rear elevations that are visible from parks, open space areas, and public rights-of-way should feature trim surrounds, headers, or sills. Trim should be proportionate to the size of the window, with a minimum of one inch (1"). The style of trim should be consistent with the architectural style of the building.
- **Window Style:** The style and shape of windows should be consistent with the architectural style

of the building. Where appropriate to style and window form, use of multi-paned windows is encouraged.

- Headers and Sills: The design of header, sill and trim elements must be consistent with the architectural style of the residence.
- Window Colors: Vinyl, extruded wood and clad-wood frame windows should be appropriately colored to match or complement the building or trim colors. Aluminum frames are not permitted.
- Glazing: Glazing may be either clear or tinted. Reflective glass is not permitted.
- The use of mirrored or highly reflective glass is not permitted, unless proved to be energy efficient.
- Windows on the second and third floor of a building should be treated with detailing of similar quality as those on the ground floor on all sides where visible from public view.

Awnings

Awnings, when provided, should be designed as an integral part of the architecture and should be consistent with the architectural style of the building.

Functional Elements

Mechanical Equipment & Meters

Special care should be taken that mechanical equipment does not detract from the architecture as follows:

- Mechanical equipment such as air conditioners, heaters, and evaporative coolers may not be mounted on any sloped roof.
- When mounted on flat roofs of attached homes, mechanical equipment should be completely screened by parapet walls at least as tall as the equipment screened.
- Ground mounted air conditioning units visible to public view must be screened by walls or landscaping at least six inches (6") higher than the unit and located away from pedestrian paths and project amenities, except when used in courts and lanes with limited or no screening.
- Mechanical devices such as exhaust fans, vents and pipes should be painted to match adjacent roof surfaces.

- Natural gas and electrical meters for single-family detached homes should be screened to be integral with the architecture of the home.
- Natural gas meters for attached homes should be grouped and screened behind walls or landscaping.
- Electrical meters for attached homes should be ganged and located behind doors.
- Screen walls and electrical enclosures should be designed integral to the building architecture.
- Solar panels shall be integrated into the roof design, parallel with the roof slope. Frames shall be colored to match roof colors. Any support equipment shall be enclosed and screened from view.
- Residential transformers shall be placed and screened where permitted by the utility companies.

Gutters & Downspouts

Exposed gutters and downspouts shall be colored to match or complement the surface to which they are attached, or be colored to match accent colors of the building. However, gutters and downspouts are encouraged to be located within the walls of the buildings.

Chimneys

Chimneys are not required but if used shall be simple in design and compatible with the architecture of the building. The following features are appropriate:

- Tile caps, brick or tile banding.
- Elaborated chimney tops for Spanish Hacienda style.
- Decorative metal caps that match trim colors.

Exterior Lighting

The level of on-site lighting, as well as lighting fixtures, shall comply with any and all applicable requirements of the City of Lake Forest Code. Energy conservation shall be emphasized when specifying any lighting system.

The style, color, and finish of exterior lighting fixtures shall be consistent with the architectural style of the building. The angle and intensity of lighting should be strategically planned for mobility and safety at night and should not be used in excess of its purpose.

Exterior Stairs

Exterior stairs for attached homes should be designed as an integral part of the architecture.

- Stair guardrail design should be consistent with the architectural style of the building.

Accessory Structures

To ensure cohesive design, detached garages and other similar accessory structures should be compatible in design, materials, and color with the primary building. Such structures should also visually relate to the main building through the use of courtyards, garden walls, or other landscape elements.

GREEN BUILDER PROGRAM**7.5**

The following are guidelines and programs for the Serrano Summit community and will be enforced by the project master developer:

Introduction

As part of the project's objective to create an energy efficient community of choice, builders within Serrano Summit shall incorporate green development techniques. This can be achieved through energy conservation, reduction of non-renewable resources, and California-appropriate landscape practices.

Such practices include reducing the impact of the built environment through energy reduction as well as the reduction and reuse of non-renewable resources. While a third party program is not required for residential development within Serrano Summit, builders are encouraged to participate in voluntary programs such as the California Green Builder (CGB), Energy Star, NAHB's Model Green Home Building Guidelines, Build It Green's Green Point Rated Program, and the US Green Builder Council's Leadership in Energy and Environmental Design (LEED).

California Green Builder

The Building Industry Institute has established minimum standards for California Green Builder eligibility. These guidelines set goals for significant

improvements in Energy Efficiency, Indoor Air Quality and Comfort, On-site Waste Recycling, and Water and Wood Conservation. CGB offers a certification for homes which meet the standards. For more information about CGB, visit www.cagreenbuilder.org.

Energy Star

Energy Star qualified homes are independently verified to meet strict guidelines for energy efficiency set by the U.S. Environmental Protection Agency (EPA). Typical features include efficiency in home envelope, air distribution, equipment, lighting, and appliances. For more information about Energy Star, visit www.energystar.gov

NAHB's Model Green Home Building Guidelines

NAHB's voluntary Model Green Home Building Guidelines are designed for individual builders interested in green building practices. The Guidelines contain six primary sections: Lot Preparation and Design, Resource Efficiency, Energy Efficiency, Water Efficiency/Conservation, Occupancy Comfort and Indoor Environmental Quality, and Operation/Maintenance/Education. For more information on the NAHB's Model Green Home Building Guidelines, visit www.nahb.org

Green Point Rated

GreenPoint Rated is a program of Build It Green, a professional non-profit membership organization whose mission is to promote healthy, energy- and resource-efficient new home construction in California. A GreenPoint Rated home is graded on five categories: Energy Efficiency, Resource Conservation, Indoor Air Quality, Water Conservation, and Community. For more information on the Green Point Rating program, visit www.builditgreen.org.

LEED

The LEED program categorizes performance in five areas: Site Development, Water Savings, Energy Efficiency, Materials Selection, and Indoor Environmental Quality. Sub-programs include LEED-ND (neighborhood development), LEED-NC (new construction) and LEED-H (homes). The LEED program offers four levels of certification: certified, silver, gold, and platinum. For more information on the LEED certification process, visit www.usgbc.org

Energy Conservation through Building Design

At a minimum, all buildings (except for ancillary buildings) shall either exceed the 2007 California Energy Code – Title 24, Part 6 in energy efficient design by at least 15% or comply with the California Green Building Standards Code, which was adopted in 2008. In order to meet this standard, elements of energy efficient design may include, but are not limited to:

1. High efficiency lighting:
 - ~ The installation of high efficiency lighting, such as CFLs (compact fluorescent lighting), greatly reduces energy consumption.
2. Low energy cooling system, such as engineered HVAC systems with tight HVAC Ducts
 - ~ Low energy HVAC systems that are installed with tight ducts increase the efficiency in heating and cooling the home.
3. Improved drywall, insulation, and sealing installation
 - ~ Proper installation helps to maintain the desired temperature inside the home, lessening the dependence on mechanical heating and cooling systems.



4. Cool roofs
 - ~ A cool roof reflects and emits the sun's heat back to the sky instead of transferring it to the building below. "Coolness" is measured by two properties, solar reflectance and thermal emittance. The higher the value, the "cooler" the roof. By limiting heat penetration into the attic and living areas of the home, dependence on mechanical cooling systems can be reduced.
5. Dual-glazed LoE2 windows with high-efficiency glazing (SHGC and U-value < 0.40)
 - ~ Dual-glazed Lo E2 windows limit heat and coldness penetration, therefore reducing the need for mechanical heating and cooling.

In addition, builders within the community are encouraged to incorporate other energy efficient design elements. Such elements may include, but are not limited to:

1. On-site renewable energy systems (PV solar panels and solar water heaters)
 - ~ Roof-integrated photovoltaic cells can be used to offset energy consumption.
2. Energy Star appliances
 - ~ Energy Star appliances use a minimal amount of energy and lessen the home's overall energy consumption.
3. Natural Ventilation – Window Placement and Home Orientation
 - ~ Proper window placement and home orientation allows for natural ventilation, thus lessening the dependence on mechanical cooling systems.
4. Architectural shade elements
 - ~ Architectural shade elements (such as overhangs and awnings) protect excess sun from entering the home, keeping the house cool during the hot summer months.

Reduction of Non-Renewable Resources

The reduction of non-renewable resources is an important aspect of green design. Such reduction practices include, but are not limited to:

1. Utilization of Environmentally Preferable Building Materials
 - ~ Environmentally preferable building materials such as non-virgin, renewable, and recyclable materials aid in the reduction of non-renewable resources.
2. Construction Waste Recycling Program

- ~ On-site recycling and/or donation of scrap materials to local charitable organizations greatly reduce construction waste.
3. Low-flow Water Fixtures
 - ~ Low-flow water fixtures limit the amount of water used on a home basis.

California-Appropriate Landscape Practices

Elements of California-appropriate landscape practices include, but are not limited, to California-friendly landscape, water-conserving irrigation practices, and energy conservation. These practices include but are not limited to:

Water-Wise and California-Friendly Landscape

- California-appropriate vegetation that reduces the consumption of water shall be incorporated into Serrano Summit's landscape. See Landscape Guidelines for the Master Plant Palette.
- Planting design (species, quantity, size and spacing) shall achieve 70% landscape area coverage within two (2) growing seasons from installation.
- Plants with high water demand are encouraged to be located in shade areas, in small highly visible areas, or where more runoff naturally occurs.
- The use of turf grass is encouraged in active use areas only. Groundcovers and drought-tolerant grasses that require less water are encouraged in non-active areas.
- No more than 50 percent of homeowner's property outside the building envelope shall be to be planted with turf; this reduces water usage by requiring a greater amount of private landscape to utilize a California friendly landscape palette.
- No more than 25 percent of homeowner's front yard landscape shall be to be planted with turf.
- Plants of similar water requirements shall be grouped to allow more effective use of irrigation.
- The ground plane shall be covered with a minimum 2" layer of decorative material to improve water-holding capabilities of soil through reduced evaporation and compaction.
- The use of decorative gravel is encouraged as a design element to offer a variety of colors and texture within landscape areas. The size of the material is to be suitable so as to remain in place once it has been installed.

- The use of mulch can also be used in landscape areas. The size of the material is to be suitable so as to remain in place once it has been installed.
- Install a 12" minimum border of decomposed granite/decorative gravel along back of curb within the parkway to minimize irrigation overspray into the gutters.
- A demonstration garden incorporated into park space as a public outreach effort to inform and educate the community is encouraged.
- Turf areas shall be sized and shaped to optimize irrigation efficiency. Turf type and location shall be selected in the same manner as other plantings. Turf shall not be treated as a fill-in matter but rather as a planned element of the landscape. All turf areas shall be on separate irrigation zones. The following conditions shall apply:
 - a. *No turf may be used on slopes greater than 4:1.*
 - b. *If turf is used in isolated areas (i.e. driveway strips) subsurface irrigation or micro-spray heads shall be required to avoid over-spray.*
 - c. *Turf areas less than eight (8) feet wide on the shortest side shall be irrigated with subsurface irrigation or micro spray heads.*
 - d. *Irregular shapes that cannot be irrigated efficiently shall be avoided.*
- Turf shall not be planted within landscaped parkways and/or median.
- Artificial turf shall be permitted within all areas of Serrano Summit except for Planning Areas 17 and 18.

Water-Conserving Irrigation Practices

- Utilizing point-irrigation systems is encouraged to allocate more efficient delivery of water to root systems and minimize run-off.
- Utilizing a weather-based master irrigation controller system that employs the use of current satellite weather data and rain shut-off device to ensure that the irrigation schedule is based upon actual "real time" plant needs. This allows for a greater level of control within the irrigation system and minimizes potential water waste.
- Using reclaimed water in large, public open spaces is encouraged.
- Design irrigation system based upon solar exposure. Irrigation heads should be grouped in South/West and North/East exposures. This ensures that heads with similar sunny exposure will be grouped together on the same valve and heads with similar shaded exposure will be grouped together.

- The use of overhead spray heads is discouraged in small non-turf applications. The use of point irrigation or sub-surface irrigation dripline root zone irrigation system negates overspray and reduces water waste.
- Turf areas shall be irrigated with equipment that has a precipitation rate of one (1) inch or less per hour as specified by the manufacturer. Stream rotator heads are preferred; use of standard spray heads shall be avoided.

Energy Conservation Through Landscape Design

- Community and residential area landscapes are encouraged to be designed to assist with energy conservation, including planting deciduous trees next to buildings and along streets to reduce ambient temperature, reduce heat gain, allow for cool natural ventilation, and provide a more pleasant pedestrian environment.
- Deciduous trees and vines are encouraged to be planted in front of south-facing walls and windows to further cool buildings by intercepting sunlight during summer months, yet allow direct sunlight during the winter.
- Green screens (metal lattices planted with vines and/or climbing flowers) are encouraged to shade south and west-facing walls to reduce interior heat gain and beautify buildings.
- Trees with appropriate heights and spreads are encouraged to provide ample shade in the summer months for outdoor spaces such as patios and plazas, pedestrian walkways, roadways and parking lots. Structures such as trellises and porticoes should also be incorporated into the building/landscape edge, especially on south and west-facing exposures, to provide shade in the summer and allow solar penetration when the sun is at a low angle in the winter.
- Landscape buffers, screens and windrows are encouraged to be located so they facilitate cooling by prevailing breezes in summer months.
- Using trees or shrubs to shade the air-conditioning units can help increase its efficiency and reduce the temperature inside the home by several degrees.
- As technology develops, employing an appropriate means of capturing, storing and reusing on-site waste run-off water within an individual residential property is encouraged.